

Title: The Relationship Between Constructivist Supervisory Practices, School Climate, and Student Proficiency in Reading, Mathematics, and Science: Evidence from NELS:88

Author: John A. Molnar

Dissertation Chairman: Dr. Wenfan Yan

Dissertation Committee Members: Dr. Cathy Kaufman  
Dr. Robert Millward

#### ABSTRACT

In an effort to improve instruction and student learning, school reform efforts have become prevalent. School reformers have examined many aspects of the school experience, including learning theories such as behaviorism and constructivism, the changing roles of teachers and supervisors, and even the concept of the school itself. The theoretical framework for this study centered around constructivist learning theory. The study itself focused on the application of constructivist learning theory to the supervisory process. The study examined five areas of interest: a) teachers' perceptions of constructivist supervisory behavior; b) teachers' perceptions of efficacy and control in the classroom; c) teachers' perceptions of school climate; d) teachers' perceptions of job satisfaction, and e) the influences of each of the aforementioned on student proficiency in mathematics, reading, and science.

Data for the study was drawn from the first follow-up survey of the National Educational Longitudinal Study of 1988 (NELS: 88). NELS: 88 investigated a wide variety of factors that influence the

educational process. The first follow-up focuses on environmental factors that affect teachers and students. Variables were selected from the NELS:88 data set that represented the areas to be examined. Factor analysis and correlational analysis were applied to ensure that the variables were measuring distinct constructs and to determine ways they could be grouped for analysis. Multiple linear regression analysis was applied to determine relationships among the individual and composite variables, controlling for student and teacher demographic factors.

The results of the study suggest that varying relationships do exist between constructivist supervisory practices and the constructs measuring school climate and job satisfaction. The results also suggest that varying relationships exist between each of these factors and student proficiency in mathematics, reading, and science. Specifically, school climate, job satisfaction, and student proficiency were influenced by constructivist supervisory practices that included teachers' freedom to experiment with teaching and teachers' control over texts and materials.